

STUDIES IN THE EUPATORIEAE (ASTERACEAE). CXLII.

A NEW GENUS, BADILLOA.

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The Critonioid Eupatorieae of the northern Andes include one group showing a combination of broad style branches, larger pollen, mostly deciduous inner phyllaries, glands on the achenes and sharply demarcated carpodia. In most of the species in the group the leaves are pinnately veined and the heads usually contain only about ten flowers. The inflorescence tends to have prominent spreading pairs of primary branches. The group resembles the genera Aristeguetia and Grosvenoria which have similar broad styles and larger pollen. The former differs by the less deciduous phyllaries, the often glabrous corollas, the strictly non-glandular achenes, the indistinct carpodia, the less spreading pappus, the larger number of flowers per head and the generally more ascending less opposite branches of the inflorescence. Relationship to Grosvenoria is closer but the latter has multistriate phyllaries, more prominent but less sharply demarcated carpodia and generally flatter pappus setae with some enlarged tips. The distinct group is described here as a new genus, Badilloa.

The genus Badilloa shows uniformity in most of its characters but the concept has been extended to include one rather anomalous related species. The Venezuelan B. steetzii differs from other members of the genus by its more prominently trinervate leaves and by the greater number of flowers per head (15-23). The species shows some resemblance to Asplundianthus pseudostuebelii R.M.King & H.Robinson of Colombia which is anomalous in its genus by the presence of some glands on the achene. In B. steetzii the pointed phyllaries, the larger number of flowers per head, the densely glanduliferous achenes, the more sharply demarcated carpodia, the broader styles and the larger pollen indicate the species is remote from the genus Asplundianthus and related closely to other species of Badilloa.

The genus is named for Dr. Victor M. Badillo, author of numerous papers dealing with the Asteraceae

of Venezuela.

Badilloa R.M.King & H.Robinson, genus novum Asteracearum (Eupatorieae). Plantae frutescentes erectae ramosae. Caules teretes. Folia opposita breviter petiolata, laminis oblongis vel lanceolatis interdum minute bullatis glanduliferis, nervis secundariis plerumque pinnatis. Inflorescentiae corymbosae, ramis saepe late patentibus. Squamae involucri valde subimbricatae multiseriatae valde inaequales bicostatae interiores facile deciduae; receptacula plana vel leniter convexa glabra. Flores 9-23 in capitulo; corollae anguste infundibulares, lobis triangularibus laevibus extus glanduliferis; filamenta in parte superiore aliquantulum incrassata, cellulis quadratis vel oblongis, parietibus valde annulate ornatis; cellulae exotheciales subquadratae, appendicibus parum longioribus quam latioribus; styli inferne glabri non nodulosi, ramis late linearibus leniter mamillosis. Achaenia prismatica 5-costata dense glandulifera; carpopodia distincta superne abrupte limitata, cellulis subquadratis multiseriatis, parietibus vix vel mediocriter incrassatis; pappus setiformis uniseriatus, setis ca. 30-35 scabris superne non vel vix incrassatis, cellulis apicalibus acutis. Grana pollinis sphaerica ca. 25 $\mu$  diametro minute spinulosa.

Species typica: Eupatorium salicinum Lam.

Our studies indicate the genus contains the following nine species.

Badilloa drepanoides (B.L.Robinson) R.M.King & H.Robinson, comb. nov. Eupatorium drepanoides B.L. Robinson, Proc. Amer. Acad. 55: 12. 1919. Peru.

Badilloa helianthifolia (H.B.K.) R.M.King & H.Robinson, comb. nov. Eupatorium helianthifolium H.B.K., Nov. Gen. et Sp. 4: 99. 1818. ed. fol. Peru.

Badilloa herrerae (B.L.Robinson) R.M.King & H.Robinson, comb. nov. Eupatorium herrerae B.L.Robinson, Contr. Gray Herb. n.s. 80: 20. 1928. Peru.

Badilloa procera (B.L.Robinson) R.M.King & H.Robinson, comb. nov. Eupatorium procerum B.L.Robinson, Contr. Gray Herb. n.s. 73: 17. 1924. Peru.

Badilloa salicina (Lam.) R.M.King & H.Robinson, comb. nov. Eupatorium salicinum Lam., Encyc. 2: 409. 1786. Colombia, Ecuador.

Badilloa sonsonensis R.M.King & H.Robinson, sp. nov.

Plantae usque ad 2 m altae. Caules dense breviter purpureo-hirsuti. Folia opposita, petiolis 5-8 mm longis, laminis ellipticus 4-6 cm longis et 1.5-3.0 cm latis base cuneatis margine multo crenulatis apice breviter acutis vel obtusis supra vix bullatis sparse scabridis et glanduliferis subtus dense glanduliferis et in nervulis tomentellis, nervis secundariis pinnatis, nervulis subtus dense reticulatis prominentibus. Inflorescentiae ca. 6 cm altae et 10 cm latae. Capitula ca. 7 mm altae; squamae involucri ca. 16 subimbricatae ca. 4-seriatae ca. 1-6 mm longae ovatae vel lineares apice anguste rotundatae extus sparse hirtellae; receptacula leniter convexa sparse hirtella. Flores ca. 10 in capitulo; corollae rufescentes ca. 5 mm longae anguste infundibulares solum extus in lobis glanduliferae; lobis parum longioribus quam latioribus; filamenta in parte superiore ca. 300  $\mu$  longa; thecae ca. 1.5 mm longae. Achaenia ca. 2 mm longa prismatica plerumque in costis dense glandulifera; carpodia brevia, cellulis ca. 6-seriatis ca. 12-15 $\mu$  diametro; setae pappi ca. 35. Grana pollinis 25-27 $\mu$  diametro.

Type: COLOMBIA: Antioquia: Cordillera Central, Párama de Sonsón, above Sonsón, at 2930 m. Shrub 2 m high, not common, in paramillo thicket; fls. lilac. May 23, 1944. J.A.Ewan 15705 (US, holotype). Paratype: COLOMBIA: Antioquia: "Paramo de Sonson" along or near carretera between Sonson and Narino, elev. 9000-9600 ft. (not actually paramo - "paramillo"). Shrub 5 ft. high; flowers pink or violet; leaves firm; dark beneath. May 23, 1944. E.L.Core 736 (US).

The new species is most like Badilloa venezuelensis but has coarser pubescence on the stems and leaves, firmer corollas, more uniformly narrow-based pappus setae and the achenes with glands more restricted to the ribs.

Badilloa sphagnophila (B.L.Robinson) R.M.King & H.Robinson, comb. nov. Eupatorium sphagnophilum B.L. Robinson, Contr. Gray Herb. n.s. 73: 18. 1924. Peru.

Badilloa steetzii (B.L.Robinson) R.M.King & H.Robinson, comb. nov. Eupatorium steetzii B.L.Robinson, Proc. Amer. Acad. 55: 36. 1919. Venezuela.

Badilloa venezuelensis (Badillo) R.M.King & H.Robinson,  
comb. nov. Eupatorium venezuelense Badillo, Bol.  
Soc. Venez. Cienc. Nat. 9: 131. 1944.  
Venezuela.

#### Acknowledgement

This study was supported in part by the National  
Science Foundation Grant BMS 70-00537 A04 to the  
senior author.



PLANTAS DE COLOMBIA - 18344-20  
 Badilloa sonsonensis R.M.King & H.Robinson  
 18344-20



PLANTS OF COLOMBIA  
 Department of Agriculture, Bureau of Plant Industry, Washington, D.C.

1872 *sermonia*  
 Shrub 7 m. high, not common, in paramillo thickets; fls. lilac

Shrub 2 m. high, not common, in paramillo thickets; fls. lilac; at 2900 m.

Departamento de Sonson Department of ANTIQUERIA  
 Sonson, Colombia 274,280 m. alt.  
 18705 22 MAY 1944

Badilloa sonsonensis R.M.King & H.Robinson,  
 Holotype, United States National Herbarium. Photos  
 by Victor E. Krantz, Staff Photographer, National  
 Museum of Natural History.